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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,038	03/03/2004	Melissa K. Rath	ATMI-668	4823
24239	7590	04/13/2006	EXAMINER	
MOORE & VAN ALLEN PLLC P.O. BOX 13706 Research Triangle Park, NC 27709			LE, HOA VAN	
			ART UNIT	PAPER NUMBER
			1752	
DATE MAILED: 04/13/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/792,038

Applicant(s)

RATH ET AL.

Examiner

Hoa V. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/28/05, 01/24 and 03/03/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-59 is/are pending in the application.
- 4a) Of the above claim(s) part B of 7,8-9,11-13 and 22-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,10,14-21 and 53-56 is/are rejected.
- 7) ☒ Claim(s) part A of 7 and 57 is/are objected to.
- 8) ☒ Claim(s) part B of 7,8-9,11-13 and 22-52 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

This is in response to Papers filed on 28 November 2005, 24 January and 27 March 2006.

I. Corrections: There are some mistakes in the Office action mailed on 03 March 2006.

- The invention of Group A should have claims 1-2, 4-7, 10, 14-21 and 53-57,
- Claim 8 has been in independent form.

II. The prosecution history shows that the Groups of claims as later amended develop and/or shows and that they are independent and patentably distinct inventions and are required separate and independent searches. Additional searches are burdensome. The inventions do not stand or fall together.

III. Applicants propose an oxidant being added to a composition in the elected invention of Group A. The proposed composition is not independent and is not subject to a restriction requirement and is not to be firstly searched as the elected Formula G subspecies on the record. It should be noted that the invention of Group

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B is broader than that of Group A with respect to many possible strong bases with no salt or salts other than the limited alkali metals and alkaline earths in the elected Group A. Such distinct and broaden would be required separate and burdensome searched and do not stand or fall together since they are now independent.

IV. Applicant's election with traverse of the invention of Group I, claims 1-2, 4-7, 10, 14-21 and 53-57 in the reply filed on 27 March 2006 is acknowledged. The traversal is on the ground(s) that restriction is redundant since (1) they were related to patentably distinct species only as originally filed with (i) a proposed oxidant being added to the elected invention of Group A and (ii) an admission of an oxidant being now in the independent non-elected Group B and (2) the non-elected Group B is now developed in to independent but is not patentably distinct invention as later amended. This is not found persuasive because the claims as later amended show that they are independent and patentably distinct invention for independently distinct sets of chemical compositions and are required separate and independent searches as later amended, developed and set up on the record. The proposed composition is not independent and is not subject to a restriction requirement and is not to be firstly searched as the elected Formula G subspecies on the record. It should be noted that the invention of Group B is broader than that

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of Group A with respect to many possible strong bases with no salt or salts other than the limited alkali metals and alkaline earths in the elected Group A. Such distinct and broaden would be required separate and burdensome searched and do not stand or fall together since they are now independent.

The requirement is still deemed proper and is therefore made FINAL.

V. Conditions for a proper rejoinder:

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

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VI. Claim 7 is provisionally separated in to two portion for now with an easy identification with part A being the elected Formula G subspecies and part B being the non-elected subspecies.

VII. The record shows that applicants elect the species of the combination of (1) “a quaternary ammonium base in combination with at least one of alkali and alkaline earth base” species and (1) its subspecies of “Formulation G” in claim 7. All of the chemical ingredients and the amounts of the chemical ingredients of the elected subspecies are newly considered and searched each time an Office action being taken as required, especially with an amended claim or newly added claim, refiling application or Request for Continued Examination as that in the instant case. During the course of searches other chemical ingredients and/or their amounts are found and applied. Others chemical ingredients are not considered, searched or examined until all of the applied chemical ingredients and/or their amounts are overcome. Accordingly, claims part B of claim 7 are not applied in by Yokoi et al or Yokoi et al, Skee and Moore below and is properly without for now until all of the applied subspecies in the applied references on the record are overcome.

VIII. Chemical ingredients and their amounts of the elected Formula G in claim 7 part A have been considered and searched. The same are with it's closely related claims 58. In the absence of a pertinent reference again the elected Formula G and claim 58, no rejection is made. However, the elected Formula G and claim 58 are objected to but would be allowable if each of them is rewritten in an independent form.

IX. Since applicants amend to remove the subject mater in the elected invention of Group A in to now invention of Group B. The provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/389,214 is not applied. It will be properly applied in application with an elected invention of Group B. Accordingly, the Office should and must be informed such case to take a timely and proper action.

X. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the

invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-6, 10, 17, 19-21, 53 and 56 are provisionally rejected under 35 U.S.C. 102(e) as being anticipated by Yokoi et al (Provisional Application No. 60/479,146 filed on 18 June 2003 in Japanese Language (being about equivalent to US 2004/0259761 as being orally provided by Office Japanese translator). Its English language translation will be provided before an appeal brief is filed) until an English language translation is provided.

Yokoi et al disclose and teach a cleaning composition to remove photoresist from a substrate. The composition comprises a quaternary base and an alkali base. Please see paragraphs [0030] to [0068], [0109] and [0114].

Since Yokoi et al are reasonably disclosed and taught the claimed embodiments, the above claims are founded to be anticipated by Yokoi et al.

XI. In an alternative, claims 1-2, 4-6, 10, 14-18, 19-21, 53-56 are provisionally rejected under 35 U.S.C. 102(a) as being obvious over Yokoi et al ((Provisional

Application No. 60/479,146 filed on 18 June 2003 in Japanese Language (being about equivalent to US 2004/0259761 as being orally provided by Office Japanese translator). Its English language translation will be provided before an appeal brief is filed) until an English language translation is provided) considered in view of Skee (6,599,370) and Moore (6,551,973).

Yokoi et al disclose, teach and suggest a cleaning composition to remove photoresist from a substrate. The composition comprises a quaternary base and an alkali base with respect to the remote teachings and suggestions in the same reference and not being in an example. Please see paragraphs [0030] to [0068], [0109] and [0114].

Yokoi et al do not specify nitrilotriacetic acetic chelating agent in claims 14-16, acetylenic diols surfactant in claim 18. However, it is known in the art to obtain and use nitrilotriacetic acid chelating agent in an aqueous composition for the advantage of chelating metal ions and acetylenic diols surface active agent in a aqueous composition for the advantage of rapidly wetting treated surface in the art. Please see col.8:45 with “nitrolotriacetic” should be ---nitrilotriacetic--- acid and 9:46.

Yokoi et al generally disclose, teach and suggest the use of a quaternary ammonium hydroxide alkaline class to remove organic photoresist from a substrate

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but do not specify benzyltrimethylammonium hydroxide in claims 54 and 55.

However, it is known in the art to use benzyltrimethylammonium hydroxide in an aqueous composition as an alkaline agent to remove organic photoresist from a substrate being read within the general quaternary ammonium hydroxide alkaline class for obtaining the about same alkaline organic photoresist removing result to one having ordinary skill in the art at the time the invention was made. Applicant should show or provide a convincing evidence to the contrary for the patentability of the claims. Evidence can be seen in at least Moore at col.2:35-42.

Since the above references are all related to cleaning compositions to remove photoresist from a substrate, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite the known use of nitrilotriacetic acid chelating agent in an aqueous composition for a reasonable expectation of obtaining the advantage of chelating metal ions and acetylenic diols surface active agent in an aqueous composition for a reasonable expectation of obtaining the advantage of rapidly wetting treated surface in the art as disclosed, taught and suggested in Skee et al and benzyltrimethylammonium hydroxide in an aqueous composition as an alkaline agent to remove organic photoresist from a substrate being read within the general quaternary ammonium hydroxide alkaline class for a reasonable expectation obtaining the about same

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alkaline organic photoresist removing result to one having ordinary skill in the art at the time the invention was made. Applicant should show or provide a convincing evidence to the contrary for the patentability of the claims.

XII. Applicant's arguments filed 28 November 2005, 24 January and 27 March 2006.

have been fully considered. However, the above rejections are new with respect to newly searches and applied reference of set of references.

XIII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:30 AM to 4:30 PM on Monday through Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

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Applicants may file a paper by (1) fax with a central facsimile receiving number 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le
Primary Examiner
Art Unit 1752

HVL
06 April 2006

HOA VAN LE
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "Hoa Van Le", written over the printed name and title.